



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,204	05/07/2007	Shahram Miham	LU 6148 (US)	7727
24114 7590 07/15/2008 LyondellBasell Industries 3801 WEST CHESTER PIKE NEWTOWN SQUARE, PA 19073				
EXAMINER				
LAO, MARIA LOUISA				
ART UNIT		PAPER NUMBER		
1621				
MAIL DATE		DELIVERY MODE		
07/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,204

Applicant(s)

MIHAN ET AL.

Examiner

Louisa Lao

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-40 is/are pending in the application.
- 4a) Of the above claim(s) 26, 30-32 and 35-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-25, 27-29 and 33-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date 09/26/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II (claims 15, 16, 19, 20 and 24) in the reply filed on 6/20/08 is acknowledged. Applicants' traversal of Group I and II on the grounds that complexes of Group II are a subset of Group I, is found persuasive. Therefore, Group I and II (claims 14-25, 27-29 and 33-34) will be examined on the merits.
2. However, the traversal of Groups III- VI is on the ground(s) that Applicants allege that the logic of grouping "complex, catalyst, catalyst preparation" should follow with the rest of the groupings. This is not found persuasive because Applicants have not shown that there is a single special technical feature that meets the unity of invention for all and the rest of the inventions.
3. Claims 26, 30-32, and 35-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicants timely traversed the restriction (election) requirement in the reply filed on 6/20/08.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 14-25, 27-29 and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Milhan et al. (DE10028432 FD12/20/2001 *equivalent to* US20040242880, US'880 relied on for English version *equivalent to* WO03/024982 *in ISR*).

6. Applicants' claims are drawn to a monocyclopentadienyl complex comprising a structural formula (I), $\text{Cp-Y}_m\text{M}^{\text{A}}$, with substituents as defined therein, and formula (V), $\text{Cp-Y}_m\text{M}^{\text{A}}\text{X}^{\text{A}}_n$, with substituents as defined therein, where said catalyst is used for olefin polymerization.
7. US'880 anticipates the claims when the monocyclopentadienyl complexes, have M as a metal of group 6 of the Periodic Table (page 3 [0028], [0032]), Y as a substituent bound to Cp containing an atom of group 15 of the Periodic Table (page 3[0027], [0031]), Cp as cyclopentadienyl containing at least one fused heterocycle (page 1 [0015]), X as fluorine, chlorine, bromine, iodine (page 9 [0147] and preparation of said catalysts in examples 1-3 [0235], [0247], [0253]), respectively. US'880 teaches monocyclopentadienyl complexes for use in olefin polymerization that have solid support materials, such as *inter alia* silica gels, hydrotalcites, calcined hydrotalcites (page7 [0095-0098]).
8. Applicants' claims are drawn to the genus that encompasses the species of US'880.
9. No claims are allowed.

Conclusion

10. The art made of record and not relied upon is considered pertinent to applicant's disclosure. Kipke et al. US20070255033; Applicants' patents and co-pending applications: US6924248, US20070213484, US20070213205, US20080064838, US20080097053.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louisa Lao whose telephone number is (571)272-9930. The examiner can normally be reached from 8:00am to 8:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Elyer can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

Art Unit: 1621

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

0704-07082008ml

Louisa Lao

Examiner

TC1600 GAU 1621

/Porfirio Nazario-Gonzalez/

Primary Examiner, Art Unit 1621